

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)
2. (Canceled)
3. (Currently Amended) An extreme ultraviolet light source target wherein the extreme ultraviolet light source target is made of a gel containing heavy metal or heavy-metal compound, and a density of the heavy metal or the heavy-metal compound is 0.5% to 80% of ~~a crystal density~~ the density of a crystal of the heavy metal or the heavy-metal compound.
4. (Currently Amended) The extreme ultraviolet light source target according to claim 3, wherein the heavy metal is selected from the group consisting of Ge, Zr, Mo, Ag, Sn, La, Gd and W, ~~or and wherein~~ the heavy-metal compound ~~is~~ comprises a heavy metal selected from the group consisting of Ge, Zr, Mo, Ag, Sn, La, Gd and W.
5. (Previously Presented) The extreme ultraviolet light source target according to claim 4, wherein the heavy metal is Sn or the heavy-metal compound is SnO<sub>2</sub>.
6. (Previously Presented) The extreme ultraviolet light source target according to claim 3, wherein the target is shaped as a tape.
7. (Currently Amended) ~~The~~ An extreme ultraviolet light source target ~~according to claim 3,~~ wherein the extreme ultraviolet light source target is made of ~~frost of a gas target~~ having a density 0.5 to 80% that of a <sup>solid</sup> of the gas target.
8. (Previously Presented) A method of generating extreme ultraviolet light, comprising irradiating the extreme ultraviolet light source target according to claim 3 with a laser beam.

9. (Previously Presented) An extreme ultraviolet light source, comprising the extreme ultraviolet light source target according to claim 3 and a laser light source irradiating the target with a laser beam.

10. (Previously Presented) The extreme ultraviolet light source according to claim 9, wherein the laser light source is a light source which emits a fundamental wave or a harmonic wave of YAG laser or excimer laser.

11. (Previously Presented) An extreme ultraviolet light source comprising:  
a hopper having an outlet from which frost can be discharged;  
a freezing machine for cooling the hopper;  
a heater which can heat a wall of the hopper intermittently; and  
a vacuum chamber for keeping around the hopper in a vacuum state and having a first window for guiding a laser beam from the outside to the vicinity of the outlet, and a second window for taking out extreme ultraviolet light.

12. (Previously Presented) The extreme ultraviolet light source according to claim 11, wherein the heater works with the principle of high-frequency discharge.

13. (Previously Presented) The extreme ultraviolet light source according to claim 12, wherein a plurality of discharge electrodes of the heater are provided in an outer circumference of the hopper.

14. (Previously Presented) The extreme ultraviolet light source according to claim 11, wherein the extreme ultraviolet light source further comprises a bladed wheel having a plurality of blades radiating outward and rotatably fixed to the hopper just above the outlet, and in that the hopper is formed cylindrically just above the outlet so as to surround the bladed wheel.

15. (Currently Amended) A method of manufacturing an extreme ultraviolet light source target, wherein a density of the heavy-metal oxide of the target is made to be 0.5% to 80% of ~~a crystal~~ the density of a heavy-metal oxide crystal,

with a process comprising:

manufacturing a gel containing a heavy-metal oxide by solving a heavy-metal chloride in dehydrated alcohol and mixing this with water; and

drying the gel.

16. (Currently Amended) A method of manufacturing an extreme ultraviolet light source target, wherein a density of the heavy-metal oxide of the target is made to be 0.5% to 80% of ~~a~~ the density of a heavy-metal oxide crystal

with a process comprising:

manufacturing a gel containing a heavy-metal oxide by solving a heavy-metal chloride in dehydrated alcohol and mixing this with water; and

forming a target by mixing the gel with nanoparticles of polystyrene and heating the gel to a temperature which is 240°C or more but below a decomposition temperature of the heavy-metal oxide.

17. (Previously Presented) The method of manufacturing of the extreme ultraviolet light source target according to claim 15, wherein the heavy-metal chloride is SnCl<sub>4</sub>.

18. (Previously Presented) The extreme ultraviolet light source target according to claim 3, wherein the extreme ultraviolet light source target is a solid body of heavy metal or heavy-metal compound including voids.

19. (Previously Presented) The extreme ultraviolet light source target according to claim 3, wherein the extreme ultraviolet light source target is an aerogel body of heavy metal or heavy-metal compound.

20. (Previously Presented) The method of manufacturing of the extreme ultraviolet light source target according to claim 16, wherein the heavy-metal chloride is  $\text{SnCl}_4$ .

21. (New) A method of generating extreme ultraviolet light, comprising irradiating the extreme ultraviolet light source target according to claim 7 with a laser beam.

22. (New) The extreme ultraviolet light source, comprising the extreme ultraviolet light source target according to claim 7 and a laser light source irradiating the target with a laser beam.

23. (New) The extreme ultraviolet light source according to claim 22, wherein the laser light source is a light source which emits a fundamental wave or a harmonic wave of YAG laser or excimer laser.